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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,991	09/22/2003	William F. Graham	FA0803USNA	1764
23906	7590	08/03/2005		
E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			EXAMINER SASTRI, SATYA B	
			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 08/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/668,991	GRAHAM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Satya B. Sastri	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-11 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/26/04, 2/07/05</u> | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

1. This office action is in response to application filed on September 22, 2003, 2003. *Claims 1-11* are now pending in the application.

#### *Election/Restrictions*

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. *Claims 1-7, 9, 10*, drawn to coating composition and a coated substrate, classified in class 524, subclass 556 and class 428, subclass, 425.3, respectively.
  - II. *Claim 8*, drawn to a process of coating, classified in class 427, subclass 385.5.
  - III. *Claim 11*, drawn to a coated automobile or truck top, classified in class 428, subclass 423.1.
3. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed may be useful in a materially different process such as coating an untreated substrate.

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4. Inventions I and III are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful for coating nonmetallic objects such as wood or plastics and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

5. Inventions II and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process such as one that does not include the specific fluorine and silicon-containing monomers in the acrylic resins.

6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

8. During a telephone conversation with Mr. Benjamin Steven on April 26, 2005, a provisional election was made with traverse to prosecute the invention of I, *claims 1-7, 9, 10*. Affirmation of this election must be made by applicant in replying to this Office action. *Claims 8 and 11* are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

#### ***Claim Objections***

9. *Claim 3* is objected to because of the following informalities: n is "0" and not "O".  
Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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11. **Claim 7** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "sufficient" in claim 7 is a relative term which renders the claim indefinite. The term "***a functional polymer that is fluorinated to a sufficient amount***" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

### ***Double Patenting***

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. *Claim 1* is provisionally rejected under the judicially created doctrine of obviousness-type double patenting individually over *claim 8* of copending Application No. 10/668,989 (published as US 2005/0064093 A1) and over *claim 9* of copending Application No. 10/668,992 (published as US 2005/0064202 A1). This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of the instant claims encompass the scope of the prior art claims.

***Claim Rejections - 35 USC § 102 and 103***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. *Claims 1-7, 9, 10* are rejected under 35 U.S.C. 102(b) as being anticipated by JP-11-100797 A ('797, Machine translation).

'797 discloses a copolymer (A) derived from (a) unsaturated fluorine-containing monomer, (b) unsaturated polyorganosiloxane monomer and (c) unsaturated monomer with crosslinkable functional group and (d) other unsaturated monomers. The total weight of (a) and (b) may range from 1-80 weight%, monomer (c) may range from 10-80 weight% and (d) may range from 0-89 weight% (claim 1, page 4). Useful fluorine-containing monomers (a) are disclosed in paragraph 0006, silicon-containing monomers (b) and (c) in paragraphs 0008 and monomer (d) in paragraph 0013. As the solvent for polymerization, various alcohols and ethers are disclosed in paragraphs 0015 and 0028. Additionally, the compositions may include another polymer (b) mostly derived from monomers (c) and (d, paragraph 004). As crosslinkers, melamine resins and polyisocyanates are disclosed in paragraph 0017 and may be used in amounts ranging from 1 to 500 weight% per 100 parts of the resin. The molecular weight of the two polymers (A) and (B) may range from 2,000-100,000. The coating composition comprises 30% solids content in an organic solvent (paragraph 0067). Given that a reference that clearly names a claimed species anticipates that species no matter how many additional species are named, it is clear that '797 anticipates the presently cited claims. See MPEP § 2131.02.



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With regard to claim 7, given that the instantly recited composition reads on the prior art compositions, it is the examiner's position that the prior art compositions would inherently have the properties disclosed in the claim.

17. *Claims 1-7, 9, 10* are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2003-129003A ('003, Machine translation) in view of Johnson et al. (US 6,350,526 B1).

Prior art to '003 discloses coating material containing vinyl-copolymer resin (A) obtained by copolymerization of fluorine-containing unsaturated monomer (a), alkoxy silyl group containing unsaturated monomer (b), functionalized unsaturated monomers (c) and (d) and other unsaturated monomer (e); and crosslinker (B) which has a functional group capable of reacting with a hydroxyl group (pages 2-3, claim 1). Examples of perfluoroacrylate monomer are disclosed on page 5, claim 3 and paragraph 0010. The coating composition is disclosed for coating aluminum substrates (paragraph 0002). Alkoxy silyl group-containing unsaturated monomers are disclosed in paragraph 0011. Other functionalized monomers (c) and (d) are exemplified in paragraphs 0012 and 0013 while unsaturated monomer (e) is elaborated in paragraph 0014. The disclosed ratio of the unsaturated monomers in paragraph 0015 are 0.1 to 20 weight% of (a), 0.1 to 20 weight% of (b), 5-25 weight% of each of (c) and (d), and 50-80 weight% of (e). Crosslinker (B) may be a melamine or polyisocyanate resin used in amounts ranging from 15-40 parts per 10 parts of the composition (paragraphs 0017-0020). Working example in paragraph 0027 discloses the polymer with a molecular weight of 20,000

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in isopropanol with a solid content of 1 to 55 weight% solid. Example 1 discloses neutralizing the vinyl polymer and subsequently adding a crosslinking agent to obtain a water-based emulsion.

The difference between the prior art and the instant invention is that the instant invention claims a composition in an organic medium where as the prior art disclosed the same as a water-based emulsion.

The prior art discloses the use of organic solvents for copolymerization of the various monomers as claimed instantly. Dispersing the resultant polymers in appropriate organic solvents and/or water is a routine process performed depending on the end use of the product. For instance, the use of conventional solvents and diluents to disperse and/or dilute polymers to obtain a coating composition is taught by Johnson et al. (column 9, lines 24-31). Thus, it would have been well within the capabilities of ordinary skill in the art at the time the invention was made to include appropriate organic carriers in the compositions as disclosed by '003 and thereby obtain the instant invention.

With regard to *claim 7*, it is the examiner's position that the claimed angles are intrinsic properties of prior art compositions, absent a showing of the contrary.

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. X-references EP 0796904A and US2003/017349 cited in the search report do not disclose all three monomers and the compositional range of the various components as recited in the instant claims.

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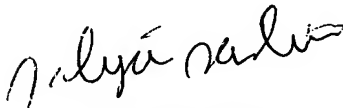
***Conclusion***

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (571) 272 1112.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached at (571) 272 1114.


The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SATYA SASTRI

July 26, 2005



FRED TESKIN  
PRIMARY EXAMINER  
1213